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HONEYWELL INTERNATIONAL INC.  
101 COLUMBIA ROAD  
P O BOX 2245  
MORRISTOWN, NJ 07962-2245

EXAMINER

AMINI, JAVID A

ART UNIT PAPER NUMBER

2672

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/833,944	<b>Applicant(s)</b> DWYER ET AL.	
	<b>Examiner</b> Javid A Amini	<b>Art Unit</b> 2672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

*Response to Arguments*

Applicant's arguments filed June 25, 2003 have been fully considered but they are not persuasive.

Applicant on page 7 of remarks dated June 25, 2003 under subject of "Introduction" argues the Examiner has ignored the limitations of the dynamic layer mode and the color prioritization mode that are separate and distinct from the transparency mode.

Examiner's reply: Applicant uses the term "dynamic layer mode". It's defined on page 11 in paragraph 0027 of the specification, the second display mode (i.e. dynamic layering mode). However, Applicant does not use the term "dynamic layer mode" in claim 10.

Applicant on page 8, under section B of remarks argues that claim 10 is associated with the dynamic layering mode, has been amended to recite, "First visual representation masks said third visual representation".

Examiner's reply: There is no claim language in claim 10 to be associated with "third visual representation" or dynamic layering mode as Applicant argued.

Examiner's comment: The broad languages that Applicant uses teach away a person skill in the art from the main invention. For example: in claim 10 at preamble uses "data categories" and in the claim uses "first visual representation", or "second visual representation". Examiner refers Applicant to see col. 3 lines 10-15 of Harrison. For example Harrison relates to graphical user interfaces providing variably transparent (transparent/semi-transparent) layered objects. The layered objects of Harrison may comprise of a first and second and third visual

Art Unit: 2672

representations. Meaning to place one element over another to create stacking of images or overlays.

Applicant on page 9 argues the limitations in claim 18 are not shown by the reference Harrison.

Examiner's reply: Harrison in col. 2 lines 20-30 teaches as prior art GUIs have used semi-transparent (partially transparent or translucent) techniques, such as stippling. These techniques generally allow foreground object images (e.g., menus, tool palettes, work areas, or windows) to be superimposed over background object images, while permitting the background object images to remain visible to the user. Applications using such techniques include video overlays (e.g., sport scores overlaid on the game in play) and "3-D silk cursors.

The reference clearly teaches in col. 3 lines 17-26 the limitations of claim language of the independent claims. Also Harrison in col.2 lines 37-49 discloses that Accordingly, variably-transparent GUIs allow multiple object image "layers" to be simultaneously observed.

Correspondingly, these interfaces are instrumental in providing integration between user tool space (foreground) and task space (background), between multiple tools, or between different object images. For example, such interfaces allow the user to interact with foreground objects, carry out activities, or change parameters that are ultimately reflected in a background layer (e.g., color changes, font changes, view changes). Correspondingly, these GUIs provide the user with a more efficient mechanism to perform operations without being overly disruptive.

*Examiner encourages Applicant to schedule an interview.*

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10, 13, 15-23 and 25 rejected under 35 U.S.C. 102(e) as being anticipated by  
Harrison et al.

1. Claim 10.

“An apparatus for displaying a plurality of data categories, comprising: a display that is configured to produce a first visual representation of a first data category of the plurality of data categories and a second visual representation of a second data category of said plurality of data categories; a processor that is configured to control said display to present said first visual representation of said first data category superimposed over said second visual representation of said second data category such that the first visual representation masks said second visual representation in a first common region of said first visual representation and said second visual representation, said processor further configured to superimpose said second visual representation of said second data category over said first visual representation of said first data category such that the second visual representation masks said first visual representation in said first common region if a predefined event is identified by said processor”, Harrison et al. illustrates in Figs. 4-5A several menus with 20% foreground and 80% background combined transparency without anti-interference outlines; in Fig. 5A illustrates several menus with 20% foreground and 80% background combined transparency with font style anti-interference outlines in accordance with a preferred embodiment of the present invention.

Art Unit: 2672

2. Claim 13.

“The apparatus of Claim 10, wherein said plurality of data categories are vehicle data categories”, Harrison illustrates in Fig. 5B. The step is inherent because the term “vehicle data categories” is equivalent of raster (graphic) data categories.

3. Claim 15.

“The apparatus of Claim 10, wherein said display is a Multi-Function Display (MFD)”, the step is inherent because Harrison’s invention is covering the multi-windows and color environment, therefore the display should be a multi function display. On the other hand the display or monitor is not the main invention in this application.

4. Claim 16.

“The apparatus of Claim 10, wherein said first data category is sensor data”, the step is inherent because any data can be considered as sensor data.

5. Claim 17.

“The apparatus of Claim 10, wherein said second data category is navigation data”, the step is inherent because any data can be considered as navigation data.

6. Claim 18.

“An apparatus for displaying a plurality of data categories, comprising: a display that is configured to produce a first visual representation of a first data category of the plurality of data categories, a second visual representation of said second data category of the plurality of data categories; and a processor that is configured to control said display during production of said first visual representation of said first data category, said second visual representation of said second data category such that a first color is provided for said first visual representation of said first data category and a second color is provided for said second visual representation of said second data category that correspond to a first priority for said first color and a second priority for said second color with a first color difference between said first color and a

Art Unit: 2672

background color of said display greater than about seventy-five and a second color difference between said second color and said background color less than about seventy-five”, Harrison et al. illustrates in Figs. 4-5A several menus with 20% foreground and 80% background combined transparency without anti-interference outlines; in Fig. 5A illustrates several menus with 20% foreground and 80% background combined transparency with font style anti-interference outlines in accordance with a preferred embodiment of the present invention.

7. Claim 19.

“The apparatus of Claim 18, wherein said first color difference is greater than about ninety (90). Harrison illustrates in Fig. 12 an adjuster for adjusting transparency level within a range of 0-100 percent transparencies .

8. Claim 20.

“The apparatus of Claim 18, wherein said first color difference is greater than about one hundred (100)”, Harrison illustrates in Fig. 12 an adjuster for adjusting transparency level within a range of 0-100 percent transparencies .

9. Claim 21.

“The apparatus of Claim 18, wherein said second color difference is less than about ninety (90)”, Harrison illustrates in Fig. 12 an adjuster for adjusting transparency level within a range of 0-100 percent transparencies .

10. Claim 22.

“The apparatus of Claim 18, wherein said second color difference is less than about one hundred (100)”, Harrison illustrates in Fig. 12 an adjuster for adjusting transparency level within a range of 0-100 percent transparencies .

11. Claim 23.

Art Unit: 2672

“The apparatus of Claim 18, wherein said plurality of data categories are vehicle data categories”, Harrison illustrates in Fig. 5B. The step is inherent because the term “vehicle data categories” is equivalent of raster (graphic) data categories.

12. Claim 25.

“The apparatus of Claim 18, wherein said display is a Multi-Function Display (MFD)”, the step is inherent because Harrison’s invention is covering the multi-windows and color environment, therefore the display should be a multi function display. On the other hand the display or monitor is not the main invention in this application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-12, 14, 24 and 26-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison, and further in view of Buxton.

13. Claim 11.

“The apparatus of Claim 10, wherein said display is configured to produce a third visual representation of a third data category of the plurality of data categories and said processor is configured to control said display to present said first visual representation of said first data category superimposed over said third visual representation of said third data category such that said first visual representation masks said third visual representation in a second common region of said first visual representation and said third visual representation, said processor further configured to



Art Unit: 2672

superimpose said third visual representation of said third data category over said first visual representation of said first data category such that the third visual representation masks said first visual representation in said second common region if a second predefined event is identified by said processor”, Harrison illustrates in Figs. 4-5A several menus with 20% foreground and 80% background combined transparency without anti-interference outlines. Harrison does not explicitly specifying three levels of visual representation, however Buxton et al. teaches in abstract The GUI utilizes variable-transparency to merge images (or layers) of objects onto a graphical display. For example, "see through" objects (such as menus, tool palettes, windows, dialogue boxes, or screens) are superimposed over similar objects or different background content (such as text, wire-frame or line art images, or solid images). Also see Figs 6-11, illustrates three different level of transparency (wire, solid and text).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Buxton into Harrison in order to enhanced system performance. That is, the optimal thresholds provided by the present invention facilitate more insightful use of visual enhancement techniques. For example, these thresholds allow system designers to predetermine the optimal transparency levels required by any particular application. As such, image-blending techniques can be embodied in system hardware to allow fast computational performance.

14. Claim 12.

“The apparatus of Claim 11, wherein said display is configured to produce a fourth visual representation of a fourth data category of the plurality of data categories and said processor is configured to control said display to present said first visual representation of said first data category superimposed over said fourth visual representation of said fourth data category

Art Unit: 2672

such that the first visual representation masks said fourth visual representation in a fourth common region of said first visual representation and said fourth visual representation, said processor further configured to and superimpose said fourth visual representation of said fourth data category over said first visual representation of said first data category such that the fourth visual representation masks said first visual representation in said fourth common region if a third predefined event is identified by said processor”, the step of adding more layer is obvious because according, to Harrison’s invention (col. 2, lines 38-49) variably\_transparent GUIs allow multiple object image "layers" to be simultaneously observed. Correspondingly, these interfaces are instrumental in providing integration between user tool space (foreground) and task space (background), between multiple tools, or between different object images. For example, such interfaces allow the user to interact with foreground objects, carry out activities, or change parameters that are ultimately reflected in a background layer (e.g., color changes, font changes, view changes). Correspondingly, these GUIs provide the user with a more efficient mechanism to perform operations without being overly disruptive (see col. 2, lines 38-49).

15. Claim 14.

“The apparatus of Claim 10, wherein said plurality of data categories are aircraft data categories”, the step is obvious because the image of plurality of data categories can be aircraft, vehicle, house or etc., see also the rejection of claim 13.

16. Claim 24.

“The apparatus of Claim 18, wherein said plurality of data categories are aircraft data categories”, the step is obvious because the image of plurality of data categories can be aircraft, vehicle, house or etc., see also the rejection of claim 24.

17. Claim 26.

Art Unit: 2672

“The apparatus of Claim 18, wherein said first data category is sensor data”, the step is obvious because any data can be considered as sensor data.

18. Claim 27.

“The apparatus of Claim 18, wherein said second data category is navigation data”, the step is obvious because any data can be considered as sensor data.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini  
Examiner  
Art Unit 2672

Javid Amini

  
JEFFERY A. BRIER  
PRIMARY EXAMINER